

Measuring Consumer Desire for Participation in Clinical Decision Making

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A sample population of some two hundred subjects in Vancouver was surveyed to determine the physician/patient role orientations preferred by patients in clinical decision making. Eight dimensions of role orientations were identified, and indexes measuring these were defined. Index scores obtained for the population studied indicate that they wished to employ physicians as information sources and to a certain extent as decision makers, but that they also wished to have some input into the decision process. Analysis of sociodemographic and experiential variables did not identify any single variable that could predict role preferences.

Studies of consumer participation in health-care decision making have focused on what may be termed “detached” health behavior—i.e., participation in policies and management of health care services. Williams [1] suggests consumer participation to resolve the question of trade-offs among attributes of costs, accessibility, and scope of treatment in planning health care systems. Bryant et al. [2] report on OEO Neighborhood Health Center programs directed by community leadership advised by health professionals and conclude that this participation contributes to meeting the needs of the poor. Parker [3] describes the Berkeley Consumer Health Training Project, designed to train laymen for duty in a community health program. Wells [4], reviewing consumer participation in regional medical programs, concludes that consumer involvement has generated innovation in planning. Kindig [5] suggests that important social factors in medicine are being ignored and that the emphasis in health care is placed on institutions rather than patients; he proposes grass-roots mobilization as a stimulus to reverse this phenomenon. Kramer [6] proposes a new relationship between consumers and health professionals in policy formulation for health care. He suggests that consumers may eventually have several functions in health care, including negotiation, consultation, and policy formulation as well as instruction in professional health schools.

While consumer participation in design, policy formulation, and even administration of health care is gaining acceptance among professionals, little attention

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has been paid to consumer participation in health-care decisions concerning the patient in the clinical setting. Some studies have focused on attitudes of patients toward physicians (Hulka et al. [7]), and others have described the nature and function of physician/patient communications and interactions (Korsch et al. [8], Davis [9], Kertesz [10], Zola [11]); none, however, have explicitly studied the desired level and mode of participation in decision making by patients.

"Because medical knowledge is so complicated, the information possessed by the physician as to the consequences and possibilities of treatment is necessarily very much greater than that of the patient" (Arrow [12]). The patient can be viewed as a "buyer" of information, consulting, and decision services. It is this relationship that typifies most acts of medical care. Physicians make decisions on behalf of patients, presumably choosing the treatment strategies that are "best" in some sense for the patients.

Differences between physicians and patients on the values associated with different courses of medical and preventive actions are to be expected. The physician views the world through a web of medical ethics, professional norms, and a subjective view of the patient's life situation obtained in brief glimpses during the physician's hurried schedule of appointments. The consumer-patient views the world through his experiences and may differ in the importance he gives to such concerns as absence from his job, financial sacrifice, or absence from his family. The choice of treatments must be based on resolution of the discordant preference patterns of the physician and the patient. In delegating powers of decision to the professional, the patient often, without intending to do so, delegates to the physician the right to define his objectives.

It has been demonstrated empirically that urgency ratings of the consequences of health conditions vary between consumers and physicians. One study (Cauffman et al. [13]), in analyzing referrals from a school health program, hypothesized that the physicians' urgency ratings would correspond with the parents' ratings. It was found, however, that the physicians' ratings were almost totally unrelated to those of the parents; the parents' lack of response to physicians' advice reflected their legitimately different preferences, and more information was not likely to change their decisions. Compliance with physicians' instructions seemed to increase with parent/physician interaction and with an increase in the parents' perceived severity of conditions.

One may consider the medical decision process as conditioned by some weighted average of the patient's and the physician's preferences. The weights are associated with the "degree of delegation," and the range will vary as a function of the interaction between the physician and the patient. For example, in "detached" health behavior such as voting on health issues, the consumer assesses the information supplied by the professional and assigns preferences independent of the physician's opinion. Once a physician is contacted for care, however, the decision process becomes one in which the physician's preferences often dominate. The degree of delegation is also affected by the patient's health knowledge (that is, his perception of the probabilities of contracting a condition), his evaluation of the credibility of the physician, and his perception of probable consequences.

The general public finds it difficult to judge the quality of medical performance with any degree of assurance. Current concepts of health education centering on preventive measures and presymptomatic referral do not contribute to the decision-making abilities or the interactive abilities of the consumer once he enters a clinical decision situation. Many health education efforts, in fact, merely increase, unintentionally, the imbalance in social status between patient and physician. The high social standing of the medical profession (Hodge et al. [14]) leads to a broad acceptance of physicians' services and general compliance with their advice. Thus consumer participation in clinical health decisions has been small in recent years.

Szasz and Hollender [15] describe three types of physician/patient relationships in terms of decision behavior. The models are (1) activity-passivity, (2) guidance-cooperation, and (3) mutual participation. In the first model the patient is completely helpless and passive and the physician does something to him; this model is seen as appropriate for emergencies. The second type applies to acute disorders and especially to those of an infectious type. The patient can exercise judgment, but he is expected to look up to his physician and obey him. The third type, mutual participation, is presented as appropriate for the management of chronic illnesses, in which the treatment program is carried out by the patient with only occasional physician consultation. Here the physician helps the patient to help himself.

The Szasz and Hollender models are prescriptive, indicating how the authors believe patients *ought* to behave in various situations. In contrast, the study reported here focused on the question of which of these roles patients *desire* in the clinical decision situation and how these preferences aggregate to form dimensions of desired role activities. The study attempts to develop a methodology to identify the nature of the physician service desired by patients in clinical decision making—that is, whether they desire to employ the physician as an information source and processor, as a consultant, or as an ultimate decision maker; and in applying the methodology, to contribute some empirical observations to the ongoing theoretical discussion concerning the role patients would like to play in the clinical decision process. It was hoped also that the investigation might provide planners with socioeconomic measures that could predict role preferences for large groups.

Methodology

Questionnaire

To examine role preferences, a structured interview was designed. The interviewer presents the subject with a case study of a common medical situation: a patient complaining of sore throat and initiating a visit to a physician's office. This complaint was chosen because it is one that almost everyone has experienced and can identify with; there are several therapeutically acceptable strategies the physician can choose, each yielding a different set of potential consequences; and it has been documented and analyzed from a decision-

INITIAL VISIT		RETURN VISIT	
<i>Patient Actions</i> (A)	<i>Physician Actions</i> (B)	<i>Patient Actions</i> (C)	<i>Physician Actions</i> (D)
How important is it that the patient:	How important is it that the doctor:	How important is it that the patient:	How important is it that the doctor:
1. Ask the physician for further information as to the possible causes of his condition? 2. Ask if there is any positive treatment besides just the relief provided by gargling? 3. Just follow the doctor's orders and go home? 4. Ask for information about possible developments that might occur if his ailment is not a simple sore throat? 5. Ask the doctor whether there is a patent medicine that would help his condition? 6. Stop at the drugstore to get a patent medicine (e.g., Contac-C) for sore throats? 7. Ask the doctor to give him all the information he has, and then the patient decides what to do?	1. Explain to the patient the alternatives involved, but then prescribe treatment without consultation? 2. Explain to the patient the alternatives and let the patient choose the treatment? 3. Tell the patient nothing further?	1. Ask the physician for further information as to how likely it is that he has either a strep or viral infection? 2. Read about bacterial infection in a textbook or medical magazine to learn something of his condition? 3. Ask his friends who have had sore throats how they dealt with it? 4. Ask the doctor to prescribe something else since the condition still persists? 5. Let the doctor continue his treatment and don't say anything? 6. Consult another doctor? 7. Ask the doctor to take a throat culture to find out what is really wrong? 8. Ask the doctor to prescribe penicillin? 9. Ask the doctor if there are any symptoms which would suggest which kind of sore throat it is and then tell the doctor if he has any of these symptoms? 10. Read the "medical advice" column in a newspaper or magazine?	1. Explain to the patient what the possible alternatives are and the consequences of each and then prescribe for one of them? 2. Explain the alternatives and their consequences and then let the patient choose one? 3. Do whatever he thinks is right under the circumstances and tell the patient nothing?

Questionnaire: possible patient and physician actions.

theoretic point of view (Rubel [16]). The scenario presented to each subject by the interviewer was developed as follows:

A patient complaining of a sore throat makes an appointment to see his doctor. The physician examines him generally to see if any more significant illness is present. Finding nothing, he diagnoses the case as an ordinary sore throat. At this point, because he is unable to determine the exact cause of the sore throat, he is unsure about the correct treatment. The physician explains to his patient that, barring unusual cases, the sore throat may be caused by either bacteria (streptococci, leading to "strep throat") or a virus. If the patient has a strep throat, penicillin, rest, and gargling are necessary; if he has a viral sore throat, rest and gargling. This is *all* the information the doctor actually gives his patient. The doctor advises his patient to go home, gargle with $\frac{1}{2}$ teaspoon of salt dissolved in water, and go to bed, returning if the condition does not improve by the following day.

The physician actually possesses more information than this, and notes mentally the following facts. If he leaves a bacterial infection untreated, there are three things that may happen:

1. The patient may develop rheumatic fever, a serious illness which may affect the heart valves, but which fortunately is uncommon and caused only by certain strains of streptococcus. This risk is revealed by a throat culture. It can be prevented by taking penicillin for ten days.

2. The patient may develop an abscess; this may require surgery. Abscesses are often caused by bacteria other than streptococci which are resistant to penicillin therapy. Again these bacteria are identified by a throat culture.

3. In either case above, the infection may spread to other organs (causing pneumonia, for example). This would usually require hospitalization.

If he treats the patient with penicillin, two things may happen:

1. The patient may have an allergic reaction which, if not recognized, could lead to a potentially serious rash or to difficulty in breathing and collapse.

2. The patient may experience an overgrowth of organisms resistant to penicillin and develop diarrhoea, ulcerations, etc., which could be more serious than a simple "sore throat."

The subject is then asked to project himself into the role of the patient's advisor and to rate a series of possible actions the patient might take. The actions are rated on a Likert scale of importance [17] ranging from 1 (Unimportant) to 5 (Very important). The subject is also asked to rate actions the physician might take in this situation. The case study is then continued with the patient returning for an additional visit, and the rating procedure is repeated. A complete list of the patient actions and physician actions rated is shown in the figure opposite (p. 124). Information on 31 sociodemographic and health-care variables (Table 1, p. 126) is also obtained from the subject by the interviewer.

Sample

After a pilot test to expand and validate the patient and physician actions, the modified questionnaire was administered to an interview sample of 200 subjects in the city of Vancouver in Canada. To ensure spatial and social diversity, equal numbers of addresses were selected randomly from each census tract, using digital coordinates on a computer-based map.

Interviewers were instructed to approach men and women alternately at the

Table 1. Demographic and Health-care Variables

Age	Days absent from work for
Sex	illness in past six months
Marital status	Number of times hospitalized
Number of children	Longest hospital stay
Number of other dependents	Hospitalization in past year
Religious affiliation	Use of community health agencies
Ethnic background	Use of family physician
Education	Criteria for choice of
Occupation	family physician
Length of current employment	Time under care of same physician
Physician availability	Type of practice of family physician
at place of employment	Frequency of visits
Availability of sick leave	Change of physician because
Rate of sick-leave pay	of dissatisfaction
Threat to job from time off	Consultation with specialists
Income	Criteria for decisions to
Length of time in community	visit physician
General state of health	Most recent consultation with
	physician

selected addresses. The address list was two years old, creating a bias against persons living at new addresses, but given the relatively low rate of housing starts in Vancouver, this bias was not regarded as significant. To mitigate bias against apartment dwellers, interviewers were instructed to conduct one interview on each floor, selecting the lowest apartment number on odd floors and the highest apartment number on even floors. Because of budget restrictions, no repeat visits were planned for subjects absent from home; instead, for apartment buildings, the next apartment on the same floor was chosen, and for single-family dwellings replacement addresses were selected from the same census tract (discarding addresses where interviews had already been conducted). The bias created against active persons by the elimination of call-backs was mitigated by diversifying the sampling times to emphasize evenings and weekends. Interviewers were instructed to interview the head of the household or his wife, according to the sex required, if available; otherwise they were to select another adult (16 years or older) of the same sex in the same household. If no person of the specified sex was at home, the address was dropped. Subjects who could not communicate with the interviewer (because of language or other difficulties) were not interviewed, thus creating a bias against some recent immigrants. Altogether, 200 interviews were conducted, of which 186 were complete enough to be used in the analysis.

Because of the imperfections in the sampling procedure, the sample composition was examined when all interviews were completed. On sociodemographic variables for which 1971 Vancouver census data were available, the composition of the sample was found to be reasonably representative (see Table 2).

Analysis Procedures

The attitudinal dimensions governing the desired participation of consumers in clinical decision-making situations were identified by classic factor analysis

Table 2. Demographic Distribution of Sample Compared with 1971 Vancouver Census Data

Variable	Sample		Expected from census	
	Number	Percent	Number	Percent
Age:				
16-20	14	7.5	21.2	11.4
21-25	20	10.8	22.9	12.3
26-30	28	15.1	19.3	10.4
31-35	17	9.1	15.3	8.2
36-40	15	8.1	14.7	7.9
41-45	14	7.5	15.1	8.1
46-50	20	10.8	15.4	8.3
51-55	15	8.1	13.8	7.4
55-60	15	8.1	12.8	6.9
> 60	28	15.1	35.2	18.9
		$\chi^2 = 10.3; \alpha = .32$		
Sex:				
M	90	48.4	91.9	49.4
F	96	51.6	94.1	50.6
		$\chi^2 = .078; \alpha = .78$		
Marital status:				
Single	53	28.5	42.8	23.0
Married	105	56.5	110.7	59.5
Div./Sep.	15	8.1	14.1	7.6
Widow(er)	13	6.9	18.4	9.9
		$\chi^2 = 4.37; \alpha = .22$		
Income (dollars)*:				
< 3000	20	11.6	18.4	10.7
3000-4999	30	17.4	22.4	13.0
5000-6999	28	16.3	23.9	13.9
7000-9999	29	16.9	34.2	19.9
> 10 000	65	37.8	73.1	42.5
		$\chi^2 = 5.11; \alpha = .28$		
Religion†:				
Protestant	82	44.1	90.6	48.7
R.C.	24	12.9	38.1	20.5
Jewish	12	6.5	3.0	1.6
Other	16	8.6	22.7	12.2
None	52	28.0	31.6	17.0
		$\chi^2 = 48.2; \alpha = < .00001$		

* Information available for only 172 respondents.

† Some of the bias in religion may be due to differences in reporting.

(Harman [18]), in which factors are inferred rather than specified. Following extraction of the factors, the solution was rotated twice, using both orthogonal (Varimax) rotation and oblique rotation, to simplify the relationships between variables and factors. (Orthogonal rotation guarantees uncorrelated factors; oblique rotation permits nonzero factor correlations but yields more easily interpreted factors.) The findings of the analysis given below are those derived from the oblique rotation. The two methods yielded almost identical results, thus contributing to the credibility of the concepts in consumer perception arising

from the patterning of variables. The results of the factor analysis also served to confirm the appropriateness of the items rated in the interview in terms of their contribution to differentiation of the concepts.

Indexes were constructed from the factor scores, with items with a significant loading on a factor being given equal weights to define the corresponding index. Statistical associations between index scores of "desired participation" and the attributes of respondents (from sociodemographic and health care data) were explored by correlation techniques and analysis of variance.

Findings

Factor Analysis

Eight dimensions for the activity items shown on the questionnaire were identified by the factor analysis. The clustering of activity items loading heavily on each factor suggested the following designations:

1. "Inquiry," defined by items reflecting propensity to seek information (e.g., Item A1, "Ask the physician for further information as to the possible causes" of the condition).

2. "Self-medication," defined by items indicating a tendency to supplement physician orders with the use of proprietary drugs (e.g., Item A6, "Stop in at the drugstore to get a patent medicine").

3. "Patient Decision," defined in terms of preference for retaining the final decision function in the patient's hands (A7, "Ask the doctor to give him all the information he has, and then the patient decides what to do").

4. "Thorough Examination," relating to situations where the illness persists and indicating an insistence on more thorough examination (C7, "Ask the doctor to take a throat culture").

5. "Second Opinion," reflecting a search for additional professional opinion, such as consulting another physician (C6).

6. "Avoidance," defined in terms of items indicating propensity to delegate the decision function completely (A3, "Just follow the doctor's orders and go home").

7. "Anxiety Reduction: Reading," reflecting a propensity to reduce anxiety and uncertainty through using external written sources of information such as advice columns in newspapers (C2, C10).

8. "Anxiety Reduction: General," reflecting a wide array of uncertainty-reducing activities such as avoiding conflict with the physician (B3,-A5) while taking additional measures for treatment (A6,-A3) and on the return visit requesting additional treatment (C4, C8,-C5). As one might expect, this dimension and the preceding one were highly related ($r = .72$, $p = .001$).

The activity items entering into the indexes constructed for these dimensions are shown in Table 3 and the results of correlation analysis of the indexes in Table 4. Two interesting observations from Table 4 cast further light on the interpretation of the Avoidance index and the Anxiety Reduction: General index:

Table 3. Components of Indexes

<i>Index</i>	<i>Component Items*</i>
1. Inquiry	A1 + A2
2. Self-medication	A5 + A6
3. Patient decision	A7 + B2
4. Thorough examination	C7 + C9
5. Second opinion	C6
6. Avoidance	A3 + B3 + C5
7. Anxiety reduction: reading	C2 + C10
8. Anxiety reduction: general	-A3 - A5 + A6 + B3 + C2 + C4 - C5 + C8 + C9 + C10

* Items D1, D2, and D3 were dropped because they duplicated B1, B2, and B3; items A4, B1, C1, and C3 were dropped because they did not contribute to discrimination between factors.

• No significant relationship was found between the Patient Decision and Avoidance indexes, and Avoidance is negatively correlated with Inquiry ($r = .27$, $p = .001$). These results may be interpreted as indicating that Avoidance reflects not some general trait of passivity but rather an avoidance of the details of the subject matter (medical problems) or complete trust in the competence of the physician (or both).

• The index for Anxiety Reduction: General is strongly correlated ($r = .56$, $p = .001$) with the Thorough Examination index, and both are associated positively with the Inquiry index. This supports further the interpretation of Anxiety Reduction: General as a measure of uncertainty avoidance.

Index Profiles

A summary of the index scores is given in Table 5. On seven of the eight indexes the scores covered the entire possible range, indicating a wide diversity of opinion. For three indexes—Patient Decision, Second Opinion, and Avoidance

Table 4. Correlation Coefficients of Indexes

(p values in parentheses)

	Inquiry	Self-medication	Patient decision	Thorough examination	Second opinion	Avoidance	Anxiety reduction: reading	Anxiety reduction: general
	1	2	3	4	5	6	7	8
1		.24(.001)	.21(.002)	.30(.001)	.08(.126)	-.27(.001)	.25(.001)	.37(.001)
2			.05(.249)	.25(.001)	.04(.307)	.01(.435)	.16(.013)	.30(.001)
3				.09(.107)	.19(.005)	-.08(.145)	.11(.067)	.16(.015)
4					.20(.004)	-.15(.020)	.30(.001)	.56(.001)
5						.00(.476)	.15(.019)	.14(.033)
6							-.10(.087)	-.30(.001)
7								.72(.001)
8								

Table 5. Index Scores for Sample Normalized to the Interval [0,1]

Index	Minimum*	Maximum*	Median	Mean	S.D.
Inquiry . . . . .	.00	1.00	.75	.66	.32
Self-medication . . . . .	.00	1.00	.25	.32	.34
Patient decision . . . . .	.00	1.00	.00	.16	.26
Thorough examination . . . . .	.00	1.00	.75	.65	.33
Second opinion . . . . .	.00	1.00	.00	.19	.31
Avoidance . . . . .	.00	1.00	.00	.21	.31
Anxiety reduction: reading . . . . .	.00	1.00	.13	.23	.26
Anxiety reduction: general . . . . .	.10	0.80	.43	.44	.14

* Actually observed values.

—the median score was the minimum possible. Thus the majority of respondents do not wish to take the entire responsibility for making their own medical decisions and do not feel the need for a second professional opinion; but they do not wish, either, to be entirely passive in the physician/patient relationship.

A Spearman correlation study¹ indicated a small number of associations between the indexes and certain sociodemographic and experiential variables such as employment factors, education, health care experience, and sex.

The Self-medication index was found to be negatively correlated with length of employment ($r = -.22$, $p = .014$) and with the perceived likelihood of job retention ($r = -.20$, $p = .029$). This may imply a stronger need for quick relief and speedy recovery among those with less stable employment situations. By the same token the greater the perceived likelihood of job retention the less likely the patient is to demand a more thorough diagnosis ($r = -.29$, $p = .003$). This represents a sound position for a risk-averse patient.

The desire of patients for greater participation in decision making decreased with age ($r = -.23$, $p = .001$). Similarly, the greater the frequency of visits to the physician and the greater the length of hospitalization the less likely the patient would be to want participation ($r = -.31$, $p = .001$ and $r = -.22$, $p = .003$, respectively). Clearly, this indicates a process of socialization into the medical system. It does not, however, indicate whether this represents greater trust or a greater sense of helplessness.

Correlations between the anxiety-reducing indexes and education suggest that the higher the educational level attained by the patient the smaller his propensity to engage in anxiety-reducing activities ($r = -.22$, $p = .002$ for Index 7 and $r = -.21$, $p = .002$ for Index 8) and that women are more likely than men to take some active measures in the clinical situation in response to anxiety ($r = .27$, $p = .001$).² It was also shown that the greater the likelihood of job retention the less likely the patient was to feel the necessity to reduce his anxiety through the use of external written sources of information such as advice columns in newspapers ($r = -.23$, $p = .015$); but when it came to the more general anxiety-

¹ Full analysis results available from authors on request.

² There are problems in interpreting r and p when dichotomized variables are used, but an association is indicated.

reducing activities such as consulting other nonprofessional information sources and requesting the physician to take specific steps, no correlation was found with likelihood of job retention.

Women were found more likely than men to want a thorough examination when recovery is not prompt ($r = .19, p = .004$). This is entirely consistent with the fact that they appear more likely to feel the need to reduce anxiety through the uncertainty-reducing measures of Index 8, as mentioned above, and with their greater desire not to delegate decision making entirely to the physician ($r = -.24, p = .001$).

Persons reporting the presence of a physician at the place of employment seemed more likely to feel the need for external written sources of information to reduce anxiety ($r = .28, p = .003$) and more likely to desire participation in the decision process ($r = .28, p = .003$). This suggests that institutional physicians are less trusted than family physicians.

A one-way analysis of variance (Table 6) revealed other interesting associations between index scores and socioexperiential variables ($p < .05$). Men tended to score significantly higher than women in Avoidance. This result may be explained by a higher interest of women in the process of health care delivery and greater concern for health problems, a phenomenon reflected also in higher per capita utilization of health care services by women than by men [19]. Persons without religious affiliation scored higher on the index Second Opinion, suggesting a lesser trust in a single authority than religious persons; and Roman Catholics scored significantly lower, perhaps reflecting a readier acceptance of a single authority. Protestants scored significantly lower than other groups on Avoidance and significantly higher on Anxiety Reduction: General, while Jews scored lower than other groups on Anxiety Reduction: General. Finally, persons who had had their family physician less than one year scored above average on Patient Decision.

A two-way analysis of variance was also run to uncover interaction effects. The sample was too small to yield meaningful results for many of the variable pairs, but some interesting effects were discovered. Of particular interest were the age and income variables: neither was significant acting alone, but both formed pairs whose effects were significant, especially those pairs formed with the education variable.

Discussion

The patient role-orientation preferences found in this study would seem to fit the Szasz-Hollender guidance-cooperation model [15]. Eight activity dimensions were identified, two of which relate directly to the participation/obedience factor that is the essential concept in the Szasz-Hollender typology. The dimensions identified may be classified as information-seeking activities ("Anxiety Reduction: Reading" and "Inquiry"), indirect participation ("Thorough Examination," "Second Opinion," "Anxiety Reduction: General," and "Self-medication"), and the direct decision dimension ("Patient Decision" and "Avoidance"). Analysis of the indexes defined for these dimensions indicates generally that the dimen-

Table 6. One-way Analysis of Variance in Index Scores*

Variable†	Percent of variation explained‡						
	Inquiry	Self-medication	Patient decision	Thorough examination	Second opinion	Avoidance	Anx. reduc.: reading Anx. reduc.: general
Sex (90)	2.9(.019)	...	2.6(.026)	3.4(.011)
Religion (12)	5.1(.049)	6.1(.022)	6.6(.000)
Education (4)	8.4(.015)	...	...	...	...	6.1(.023)
Occupation (4)	8.3(.016)
Absence from work	10.1(.011)
for illness (5)	10.0(.021)	...	...	...	...	6.5(.098)	...
Sick leave (9)	7.4(.038)	...
Physician at place
of employment (27)	7.6(.007)	...	3.7(.059)	...	8.4(.004)
Job security (4)	5.9(.070)	...	...	10.8(.007)	6.5(.052)
Perceived state of
health (6)	3.9(.064)	...	...	...	...	5.3(.019)
Frequency of hospital-	3.5(.087)
ization (4)
Longest hospital stay (24)	7.0(.009)	...	...	...	4.0(.089)
Length of time with
current physician (15)	5.5(.010)	...	3.3(.061)	...	...
Criteria for visiting
physician (10)	7.6(.081)
Recent visit to
physician (4)	4.2(.099)	...	...	...	...	...	...
Use of community
health agency (91)	2.2(.040)	...	1.8(.068)	3.7(.012)	...	4.1(.006)	3.8(.008)
							4.8(.003)

* Results shown only where significant at $\geq .10$ level.

† Figure in parentheses is probability that true percentage is zero.

‡ Minimum cell occupancy in parentheses.

sions "Inquiry" and "Thorough Examination" are rated as important, indicating a desire of patients to increase their information in the clinical situation and, when results are unsatisfactory, to participate in the decision by pressing the physician to employ more effort in managing and diagnosing the problem. Direct participation ("Patient Decision"), however, was rated as unimportant by almost all subjects, although patients indicated rather strongly a desire to maintain some measure of participation ("Avoidance" receiving markedly low scores). These results suggest that the guidance-cooperation model prescribed by Szasz and Hollender is generally acceptable to the patient—at least in the circumstances hypothesized in the scenario—if the "cooperation" aspect assumes a more important dimension in the interaction.

For physicians who believe that congruence between physician and patient role preferences might lead to more effective treatment, one implication might be that they should reduce the "mystique" in the clinical situation by giving the patient more medical information and allowing him a role in directing his treatment. It is, however, not yet established whether role-preference congruence, presumably leading to greater patient satisfaction and compliance, actually enhances treatment effectiveness; and a study of a matched physician/patient sample is planned to test this question.

The authors believe that the methodology developed in the study reported here may provide a tool by which physicians can indirectly assess the role-orientation preferences of their patients. Its strong points are ease of data collection and low cost of implementation in the medical practice situation. Its accuracy, however, remains to be demonstrated, and its usefulness to physicians would depend considerably on the physician's confidence in the tool and his perceived success in using it. These are being investigated in a longitudinal study now under way in a clinic with a group of physicians interested in using the method.

It had been hoped that the study reported here might provide planners with socioeconomic measures that would predict role preferences for large groups—information that, with the planned introduction of neighborhood health care clinics in Canada, might be essential in order to ensure personnel selection harmonious with the community served. The study was not successful in providing such indicators, owing to the unexpected complexity of the interrelations between socioeconomic variables and role preferences. No single variable was found that would provide a sufficient explanation of patients' preferences; and the greatest index variance ascribable to a pair of variables was the 22.4 percent variance in the Patient Decision index, explained by splitting the population into 40 groups (8 by education \times 5 by income). Thus the identification of effective indicators will require a much larger sample than that used in this study.

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